```
! FINDPATTERNS on geneseqp:* allowing 0 mismatches

!        1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
!        2 HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
!        3 HAEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R
!        4 HSEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R                    January 3

            ADO44524  ck: 7606  len: 35    ! Ado44524 Human GLP-1 peptide derivative 8S-

2                     HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
                        HSEGTFTSDVSSYLEGQAAKEFIAWLVKGK{5}R
             1:          HSEGTFTSDVSSYLEGQAAKEFIAWLVKGKKKKKR


            ADO44525  ck: 3095  len: 37    ! Ado44525 Human GLP-1 peptide derivative 8S-

2                     HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
                        HSEGTFTSDVSSYLEGQAAKEFIAWLVKGK{7}R
             1:       HSEGTFTSDVSSYLEGQAAKEFIAWLVKGKKKKKKKR


            ADO44523  ck: 2417  len: 33    ! Ado44523 Human GLP-1 peptide derivative 8S-

2                     HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
                        HSEGTFTSDVSSYLEGQAAKEFIAWLVKGK{3}R
             1:         HSEGTFTSDVSSYLEGQAAKEFIAWLVKGKKKR


            ADO44521  ck: 7528  len: 31    ! Ado44521 Human GLP-1 peptide derivative 8S-

2                     HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
                         HSEGTFTSDVSSYLEGQAAKEFIAWLVKGKR
             1:          HSEGTFTSDVSSYLEGQAAKEFIAWLVKGKR


            ADO44532  ck: 7810  len: 35    ! Ado44532 Human GLP-1 peptide derivative 8S2

4                     HSEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R
                        HSEGTFTSDVSSYLEGQAAQEFIAWLVNGK{5}R
             1:          HSEGTFTSDVSSYLEGQAAQEFIAWLVNGKKKKKR


            ADO44522  ck: 9935  len: 32    ! Ado44522 Human GLP-1 peptide derivative 8S-

2                     HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
                        HSEGTFTSDVSSYLEGQAAKEFIAWLVKGK{2}R
             1:         HSEGTFTSDVSSYLEGQAAKEFIAWLVKGKKR


 Databases searched:
        EMBL, Release 8.0, Released on 4Apr2006, Formatted on 29Apr2006

     Total finds:              6
    Total length:    457,216,429
 Total sequences:      2,589,679
        CPU time:        34:55.55
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!!AA_SEQUENCE 1.0
ID   ADO44521 standard; peptide; 31 AA.
XX
AC   ADO44521;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human GLP-1 peptide derivative 8S-des36R-GLP1+1KR.
XX
KW   GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW   antidiabetic; anorectic; insulin secretion.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   31
FT                   /note= "C-terminal amide"
XX
PN   WO2004037859-A1.
XX
PD   06-MAY-2004.
XX
PF   10-OCT-2003; 2003WO-JP013020.
XX
PR   11-OCT-2002; 2002JP-00299283.
XX
PA   (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI   Hayashi Y,  Makino M,  Kouzaki T,  Takeda M,  Jomori T;
XX
DR   WPI; 2004-357426/33.
XX
PT   New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT   peptide, with improved transmucosal absorbability used for the treatment
PT   of diabetes.
XX
PS   Example 1; SEQ ID NO 12; 48pp; Japanese.
XX
CC   The invention relates to peptides consisting of a sequence derived from
CC   glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC   and/or substitution of one or more amino acid residues. The GLP-1 derived
CC   peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC   Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC   arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC   14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC   IV and to trypsin due to the nature of the substitution. The peptides can
CC   be synthesised by standard solid-state peptide synthesis methods. The
CC   peptides can be used in the treatment of diabetes (insulin-dependent or
CC   insulin non-dependent), obesity and excessive appetite. Sequences
CC   ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ   Sequence 31 AA;

 ADO44521  Length: 31  January 31, 2007 15:59  Type: P  Check: 7528  ..

       1  HSEGTFTSDV SSYLEGQAAK EFIAWLVKGK R
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!!AA_SEQUENCE 1.0
ID   ADO44522 standard; peptide; 32 AA.
XX
AC   ADO44522;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human GLP-1 peptide derivative 8S-des36R-GLP1+2KR.
XX
KW   GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW   antidiabetic; anorectic; insulin secretion.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   32
FT                   /note= "C-terminal amide"
XX
PN   WO2004037859-A1.
XX
PD   06-MAY-2004.
XX
PF   10-OCT-2003; 2003WO-JP013020.
XX
PR   11-OCT-2002; 2002JP-00299283.
XX
PA   (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI   Hayashi Y,  Makino M,  Kouzaki T,  Takeda M,  Jomori T;
XX
DR   WPI; 2004-357426/33.
XX
PT   New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT   peptide, with improved transmucosal absorbability used for the treatment
PT   of diabetes.
XX
PS   Example 1; SEQ ID NO 13; 48pp; Japanese.
XX
CC   The invention relates to peptides consisting of a sequence derived from
CC   glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC   and/or substitution of one or more amino acid residues. The GLP-1 derived
CC   peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC   Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC   arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC   14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC   IV and to trypsin due to the nature of the substitution. The peptides can
CC   be synthesised by standard solid-state peptide synthesis methods. The
CC   peptides can be used in the treatment of diabetes (insulin-dependent or
CC   insulin non-dependent), obesity and excessive appetite. Sequences
CC   ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ   Sequence 32 AA;

 ADO44522  Length: 32  January 31, 2007 15:58  Type: P  Check: 9935  ..

       1  HSEGTFTSDV SSYLEGQAAK EFIAWLVKGK KR
```

```
!!AA_SEQUENCE 1.0
ID   ADO44523 standard; peptide; 33 AA.
XX
AC   ADO44523;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human GLP-1 peptide derivative 8S-des36R-GLP1+3KR.
XX
KW   GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW   antidiabetic; anorectic; insulin secretion.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   33
FT                   /note= "C-terminal amide"
XX
PN   WO2004037859-A1.
XX
PD   06-MAY-2004.
XX
PF   10-OCT-2003; 2003WO-JP013020.
XX
PR   11-OCT-2002; 2002JP-00299283.
XX
PA   (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI   Hayashi Y,  Makino M,  Kouzaki T,  Takeda M,  Jomori T;
XX
DR   WPI; 2004-357426/33.
XX
PT   New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT   peptide, with improved transmucosal absorbability used for the treatment
PT   of diabetes.
XX
PS   Example 1; SEQ ID NO 14; 48pp; Japanese.
XX
CC   The invention relates to peptides consisting of a sequence derived from
CC   glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC   and/or substitution of one or more amino acid residues. The GLP-1 derived
CC   peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC   Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC   arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC   14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC   IV and to trypsin due to the nature of the substitution. The peptides can
CC   be synthesised by standard solid-state peptide synthesis methods. The
CC   peptides can be used in the treatment of diabetes (insulin-dependent or
CC   insulin non-dependent), obesity and excessive appetite. Sequences
CC   ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ   Sequence 33 AA;

 ADO44523  Length: 33  January 31, 2007 15:59  Type: P  Check: 2417  ..

       1  HSEGTFTSDV SSYLEGQAAK EFIAWLVKGK KKR
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```
!!AA_SEQUENCE 1.0
ID   ADO44524 standard; peptide; 35 AA.
XX
AC   ADO44524;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human GLP-1 peptide derivative 8S-des36R-GLP1+5KR.
XX
KW   GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW   antidiabetic; anorectic; insulin secretion.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   35
FT                   /note= "C-terminal amide"
XX
PN   WO2004037859-A1.
XX
PD   06-MAY-2004.
XX
PF   10-OCT-2003; 2003WO-JP013020.
XX
PR   11-OCT-2002; 2002JP-00299283.
XX
PA   (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI   Hayashi Y,  Makino M,  Kouzaki T,  Takeda M,  Jomori T;
XX
DR   WPI; 2004-357426/33.
XX
PT   New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT   peptide, with improved transmucosal absorbability used for the treatment
PT   of diabetes.
XX
PS   Example 1; SEQ ID NO 15; 48pp; Japanese.
XX
CC   The invention relates to peptides consisting of a sequence derived from
CC   glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC   and/or substitution of one or more amino acid residues. The GLP-1 derived
CC   peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC   Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC   arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC   14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC   IV and to trypsin due to the nature of the substitution. The peptides can
CC   be synthesised by standard solid-state peptide synthesis methods. The
CC   peptides can be used in the treatment of diabetes (insulin-dependent or
CC   insulin non-dependent), obesity and excessive appetite. Sequences
CC   ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ   Sequence 35 AA;

 ADO44524  Length: 35  January 31, 2007 15:59  Type: P  Check: 7606  ..

       1  HSEGTFTSDV SSYLEGQAAK EFIAWLVKGK KKKKR
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```
!!AA_SEQUENCE 1.0
ID   ADO44525 standard; peptide; 37 AA.
XX
AC   ADO44525;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human GLP-1 peptide derivative 8S-des36R-GLP1+7KR.
XX
KW   GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW   antidiabetic; anorectic; insulin secretion.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   37
FT                   /note= "C-terminal amide"
XX
PN   WO2004037859-A1.
XX
PD   06-MAY-2004.
XX
PF   10-OCT-2003; 2003WO-JP013020.
XX
PR   11-OCT-2002; 2002JP-00299283.
XX
PA   (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI   Hayashi Y,  Makino M,  Kouzaki T,  Takeda M,  Jomori T;
XX
DR   WPI; 2004-357426/33.
XX
PT   New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT   peptide, with improved transmucosal absorbability used for the treatment
PT   of diabetes.
XX
PS   Example 1; SEQ ID NO 16; 48pp; Japanese.
XX
CC   The invention relates to peptides consisting of a sequence derived from
CC   glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC   and/or substitution of one or more amino acid residues. The GLP-1 derived
CC   peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC   Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC   arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC   14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC   IV and to trypsin due to the nature of the substitution. The peptides can
CC   be synthesised by standard solid-state peptide synthesis methods. The
CC   peptides can be used in the treatment of diabetes (insulin-dependent or
CC   insulin non-dependent), obesity and excessive appetite. Sequences
CC   ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ   Sequence 37 AA;

 ADO44525  Length: 37  January 31, 2007 15:59  Type: P  Check: 3095  ..

      1  HSEGTFTSDV SSYLEGQAAK EFIAWLVKGK KKKKKKR
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```
!!AA_SEQUENCE 1.0
ID   ADO44532 standard; peptide; 35 AA.
XX
AC   ADO44532;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human GLP-1 peptide derivative 8S26Q34N-des36R-GLP1-5KR.
XX
KW   GLP-1; glucagon-like peptide 1; dipeptidylpeptidase IV; trypsin;
KW   antidiabetic; anorectic; insulin secretion.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   35
FT                   /note= "C-terminal amide"
XX
PN   WO2004037859-A1.
XX
PD   06-MAY-2004.
XX
PF   10-OCT-2003; 2003WO-JP013020.
XX
PR   11-OCT-2002; 2002JP-00299283.
XX
PA   (SANW ) SANWA KAGAKU KENKYUSHO CO LTD.
XX
PI   Hayashi Y,  Makino M,  Kouzaki T,  Takeda M,  Jomori T;
XX
DR   WPI; 2004-357426/33.
XX
PT   New glucagon-like peptide 1 derivatives comprising an added C-terminal
PT   peptide, with improved transmucosal absorbability used for the treatment
PT   of diabetes.
XX
PS   Example 1; SEQ ID NO 23; 48pp; Japanese.
XX
CC   The invention relates to peptides consisting of a sequence derived from
CC   glucagon-like peptide 1 (GLP-1) residues 7-35 by addition, deletion
CC   and/or substitution of one or more amino acid residues. The GLP-1 derived
CC   peptides have an added sequence at the C-terminal of formula Waa-(Xaa)n-
CC   Yaa, where Waa is arginine or lysine; Xaa is arginine or lysine; Yaa is
CC   arginine, arginine amide, lysine, lysine amide or homoserine; and n is 0-
CC   14. The GLP-1 peptide derivatives have tolerance to dipeptidylpeptidase
CC   IV and to trypsin due to the nature of the substitution. The peptides can
CC   be synthesised by standard solid-state peptide synthesis methods. The
CC   peptides can be used in the treatment of diabetes (insulin-dependent or
CC   insulin non-dependent), obesity and excessive appetite. Sequences
CC   ADO44512-ADO44534 represent examples of GLP-1 peptide derivatives.
XX
SQ   Sequence 35 AA;

 ADO44532  Length: 35  January 31, 2007 15:59  Type: P  Check: 7810  ..

       1  HSEGTFTSDV SSYLEGQAAQ EFIAWLVNGK KKKKR
```

```
! FINDPATTERNS on pir:* allowing 0 mismatches

!        1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
!        2 HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
!        3 HAEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R
!        4 HSEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R                    January 3

Databases searched:
       NBRF, Release 80.0, Released on 31Dec2004, Formatted on 21Jun2005

    Total finds:              0
   Total length:     96,216,763
Total sequences:        283,416
       CPU time:       06:13.12
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! FINDPATTERNS on uniprot:* allowing 0 mismatches

!         1 HAEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
!         2 HSEGTFTSDVSSYLEGQAAKEFIAWLVKG(K){1,9}R
!         3 HAEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R
!         4 HSEGTFTSDVSSYLEGQAAQEFIAWLVNG(K){1,9}R

Databases searched:
       UNIPROT, Release 7.2, Released on 7Mar2006, Formatted on 7Mar2006

     Total finds:              0
   Total length:     925,015,592
Total sequences:       2,849,598
       CPU time:       1:01:19.41
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January 3